REGD, GOA - 5

Panaji, 29th April, 1999 (Vaisakha 9, 1921)

SERIES I No. 5

OFFICIAL GAZETTE

GOVERNMENT OF GOA

EXTRAORDINARY

GOVERNMENT OF GOA

Department of Food & Civil Supplies

Directorate of Civil Supplies and Price Control

Notification

11/17-13/90-CSD

In pursuance of clause 4 of the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998 issued by the Ministry of Petroleum and Natural Gas, New Delhi, the Government of Goa, hereby authorises the Director, Dy. Director, Assistant Director of the Department of Civil Supplies, Deputy Superintendants of Police, Superintendants of Police and the Mamlatdars of Talukas for the purposes of clause 4 of the said order within their respective jurisdiction.

By order and in the name of the Governor of Goa.

S. P. Dixit, Director of Civil Supplies and Price Control and Ex-Officio Joint Secretary.

Panaji, 22nd April, 1999.

Notification

11/17-13/90-CSD

The Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998 issued by the Central Government under the Essential Commodities Act, 1955 (10 of 1955) and published in Part II, Section 3, Sub-Section (i) of the Gazette of India, Extraordinary dated

28-12-98 is hereby republished for the general information of the public.

S. P. Dixit, Director of Civil Supplies and Price Control and Ex-Officio Joint Secretary.

Panaji, 22nd April, 1999.

MINISTRY OF PETROLEUM AND NATURAL GAS

Order

New Delhi, the 28th December, 1998

GSR 772 (E).—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (Central Act 10 of 1955), the Central Government hereby makes the following order, namely:—

- 1. Short title and commencement.— (1) This Order may be called the Motor Spirit and High Speed Diesel (Regulation of Supply and Distribution and Prevention of Malpractices) Order, 1998.
- (2) It shall come into force on the date of its publication in the Official Gazette.
- 2. Definitions.— In this Order, unles the context otherwise requires,—
 - (a) "adulteration" means the introduction of any foreign substance into motor spirit/high speed diesel illegally or unauthorisedly with the result that the product does not conform to the requirements and specification of the product indicated in <u>Schedule I</u>;
 - (b) "consumer" means a person who purchases products directly from an Oil Company and stores and utilises the products for his own consumption and shall include his representatives, employees or agents;

- (c) "dealer" means a person appointed by an Oil Company to purchase, receive, store and sell motor spirit and high speed diesel oil whether or not in conjuction with any other business, and shall include his representatives, employees or agents;
- (d) "high speed diesel" means any hydrocarbon oil (excluding mineral colza oil and turpentine substitute) which meets the requirements of Bureau of Indian Standards specification No. IS-1460 and is suitable for use as fuel in Compression Ignition Engines;
- (e) "malpractices" shall include the following acts of omission and commission in respect of motor spirit and high speed diesel:
 - I. adulteration,
 - II. pilferage,
 - III. stock variation,
 - IV. unauthorised exchange,
 - V. unauthorised purchase,
 - VI. unauthorised sale,
 - VII. unauthorised possession,
 - VIII. over-charging,
 - IX. sale of off-specification product;
- (f) "motor spirit" means any hydrocarbon oil (excluding crude mineral oil) which meets the requirements of Bureau of Indian Standards specification No. IS-2796 and is suitable for use as fuel in Spark Ignition Engines;
- (g) "Oil company" means-any person, firm or company authorised by the Central Government who is engaged in the sale of Motor Spirit or High Speed Diesel to consumers or dealers:
- (h) "Petroleum" shall have the same meaning as assigned to it in the Petroleum Act, 1934;
- (i) "pilferage" means stealing or attempt to steal of product from a container used for transportation of the product or from a receptacle used for storage of the product and shall include any unauthorised attempt or act of tampering with such container receptacle;
 - $_{z}(j)$ "product" means motor spirit and high speed diesel;
- (k) "stock variation" means variation beyond the norms for permissible variation in stocks as given in <u>Schedule II</u>;
- (1) "transporter" means a person authorised by an Oil Company, a dealer, or a consumer, to transport motor spirit or high speed diesel oil and shall include his representatives, employees or agents;
- (m) "unauthorised exchange" means transfer or receipt of the product from dealer or consumer to another dealer or consumer or to any other persons in contravention of the directives issued by the State Government or Oil Companies;
- (n) "unauthorised purchase" means purchase of the products from sources other than those authorised by the Oil Companies;

- (o) "unauthorised sale" means sale of products by a dealer or consumer to another dealer or consumer or to any other person in contravention of the directive issued for the purpose by the State Government or Oil Companies or in contravention of any provision of this order;
- (p) "Unauthorised possession" means keeping of Motor Spirit or High Speed Diesel, in contravention of the provisions of this order, or keeping any petroleum product or its mixture, which can be used for adulteration, under the control of the dealer or any other person without valid sales documents issued by the concerned Oil Company;
- (q) "Over charging" means, sale of Motor Spirit or High Speed Diesel by a dealer at a price higher than that authorised by an "Oil company" from which the Dealer has purchased the product;
- (r) "Sale of offspecification product" means, sale of Motor Spirit or High Speed Diesel by dealer of quality not conforming to Bureau of Indian Standards specifications, No. IS 2796 and IS 1460 for Motor Spirit & High Speed Diesel or also not in conformity with Schedule I.

3. Product Supply and Transportation—

- (i) The product from the supply point shall be transported by the transporter in a container or tank truck certified fit by the concerned authorities (Explosives and Transport authorities and oil company) to carry the product with accurate calibration as certified by the Weights and Measures authority and supported by delivery documents and deliver the same to the storage or dispensing point in the same condition as delivered to him by the originating supply point both in respect of quality and quantity.
- (ii) The transporter shall ensure that the product is transported only in containers or tank trucks which are properly sealed.
- (iii) The dealer/consumer shall inspect such containers or tank trucks in which he receives the product to ensure,—
 - (a) that the container or tank truck, including the seals are not in any manner tampered with;
 - (b) that the quantity and quality of the products are as per delivery documents issued by the Oil Companies and the quality of the product conforms to the requirements indicated in Schedule I. For this purpose, the dealer//consumer shall maintain a record of densities as indicated in Schedule I and keep samples of product or take such other measures, as prescribed by Oil Company.
- (iv) No person other than the Dealer or Oil Company or their agent shall be engaged in the business of selling Product from underground storage tank.
- (v) No person shall sell or agree to sell any petroleum product or its mixture other than Motor Spirit or High Speed Diesel, as specified in Schedule I, in any form, under any name, brand or nomenclature, which can be and is meant to be used as fuel in Spark Ignition Engines or Compression Ignition Engines.

- (vi) No dealer, transporter, consumer or any other person shall indulge in any manner in any of the malpractices listed in Clause 2 (e) above.
- (vii) The delivery or sale of motor spirit and high speed diesel oil shall be made by dealers of Oil Companies only from authorised retail pump outlets.
- 4. Power of Search and Seizure-
- (A) Any Gazetted Officer of the Central or State Government or any Police Officer not below the rank of Deputy Superintendent of Police (DSP) duly authorised, by general or special order by the Central Government or State Government as the case may, be or any Officer of the concerned Oil Company not below the rank of Sales Officer may, with a view to securing compliance with the provisions of this Order, or for the purpose of satisfying himself that this order or any order made thereunder has been complied with—
 - (i) enter and search any place or premises being made use of or suspected to be made use by a dealer, transporter, consumer or any other person who is an employee or agent of such dealer/transporter/consumer or any other person, with respect to which there is reason to believe that the provisions of this order have been/are being or are about to be contravened.
 - (ii) stop and search any person or vehicle or receptacle used or intended to be used for the movement of the product.
 - (iii) inspect any book of accounts or other documents or any stock of the product used or suspected to be used in the business of the dealer, transporter, consumer or any other person suspected to be an employee or agent of the dealer, transporter or consumer.
 - (iv) take samples of the product and/or seize any of the stocks of the product which the officer has reason to believe has been or is being or is about to be used in contravention of this order and hereafter take or authorise the taking of all measures necessary for securing the production of stocks/items so seized before the Collector having jurisdiction under the provision of the Essential Commodities Act, 1955 (10 of 1955) and for their safe custody pending such production.
- (B) While exercising the power of seizure provided under clause A(iv) the authorised officer shall record in writing the reasons for doing so, a copy of which shall be given to the dealer, transporter, consumer or any other concerned person.
- (C) The provisions of section 100 of the Code of Criminal Procedure, 1973 (2 of 1974), relating to search and seizure shall, as far as may be, apply to searches and seizures under this Order.
- 5. Sampling of Product-
- (1) The Officer authorised in clause 4 shall draw the sample from the tank, nozzle, vehicle or receptacle as the case may be to check whether density and/or other parameters of the product conform to requirements indicated in Schedule I.

- (2) The Officer authorised in clause 4 shall take, sign and seal six samples of 1 litre each of the Motor Spirit or 3 of 1 lit. each of the High Speed Diesel. 2 samples of Motor Spirit (or one of High Speed Diesel) would be given to the Dealer or transporter or concerned person under acknowledgement with instruction to preserve the sample in his safe custody till the testing or investigations are completed, 2 samples of MS (and/or one of HSD), would be kept by the concerned Oil Company or department and the remaining two samples of MS (and/or one of HSD) would be used for laboratory analysis.
- (3) Samples shall be taken in clean glass or aluminium containers. Plastic Containers shall not be used for drawing samples.
- (4) The sample label should be jointly, signed by the officer who has drawn the sample, and the dealer or transporter or concerned person or his representative and the label shall contain information as regards the product, name of retail outlet, quantity of sample, date, name and signature of the officer, name and signature of the dealer or transporter or concerned person or his representative.
- (5) The authorised officer shall send the sample of the product taken under sub-clause (2) within 10 days to any of the laboratories mentioned in Schedule III appended to this Order or such other laboratory as notified by the Government in the Official Gazette for this purpose, for analysis with a view to checking whether the density and/or other parameters of the product conform to requirements indicated in Schedule I.
- 6. Power of Central Governments to issue directions.— The Central Government may, from time to time, by a general or special order issue to any dealer, transporter or consumer or any other person, such directions as it considers necessary regarding storage, sale, transportation and disposal of motor spirit or high speed diesel and upon the issue of such directions, such dealer, transporter or consumer shall be bound to comply therewith.
- 7. Provision of the order to prevail over previous orders of State Governments, etc.— The provisions of this Order shall have effect notwithstanding anything to the contrary contained in any Order made by a State Government or by an Officer of such State Government before the commencement of this Order except as respects anything done, or omitted to be done thereunder before such commencement.
- 8. Repeal and Saving.—(1) The motor spirit and high speed diesel (Prevention of malpractices in Supply and Distribution) Order, 1990 is hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the Motor Spirit and High Speed Diesel (Prevention of Malpractices in Supply and Distribution) Order 1990 shall, in so far as it is not inconsistent with the provisions of this Order, be deemed to have been done or taken under the corresponding provisions of this Order.

[F. No. P-11013/1/97-Dist.]

DEVI DAYAL, Addl. Secy.

IS 2796:1995

SCHEDULE - I

[See clause 2(a)]

Table 1: Requirements for Motor Gasoline (Clauses 4.1.1, 4.3 and 4.4.1)

Sl. No.	Characteristic	Requirements			Method of Test, Ref to	
		87 Octane 87 Octane Unleaded Leaded		83 Octane Leaded	P: of IS 1448	Annex of this Standard
(1)	(2)	(3)	(4)	(5)	(6)	(7)
í)	Colour, Visual	Colourless	Orange	Red	<u> </u>	-
· ii)	Copper Strip corrosion for 3h at 50°C	← No	ot more than No	. 1 >	[P:15]	
iii)	Density at 15°C Kg/m ³	Not limited but to be reported—			[P:16]	_
1V)	Distillation				[P:18]	
	a) Initial boiling point	← Not limited but to be reported ← →				
	b) Recovery up to 70°C (E 70), percent by volume	10-45	10-45	10-45		1
	c) Recovery up to 100°C (É 100), percent by volume	40-70	40-70	40-70		
	d) Recovery up to 180°C (E 180), percent by colume, Min	90	90	90 ·		
	e) Final boiling point, Max	215°C	215°C	215°C		
	f) Residue, percent by volume, Max	2	2	2		
v)	Octane Requirements:					
	a) Research Octane number, Min OR	87	87	93	[P:27]	-
	b) Anti-knock index, (RON+MON)/2,Min	82	82	88	[P:26] and [P:27]	
vi)	Potential gum ¹ , g/m ³ , Max	50	50	50		2
vii)	Existent gum, g/m³, Max	40	40	40	[P:29] (Air jet solvent washed)	-Annuar
viii)	Sulphur, total, percent by mass, Max	0.20	0.20	0.20	[P:34]	
ix)	Lead content (as Pb)3, g/1. Max	0.013	0.56	0.80	[P:38]⁴or [P:82]	
x)	Reid vapour pressure, (RVP) at 38°C kPa	35-70	35-70	35-70	[P:39] ⁵	
xi)	Water tolerance of gasoline-alcohol blends, temperature for phase separation ⁰ C, Max	n.				Annex-B
	a) Summer ⁶	10	10	10		
	b) Winter	0	0	0		
xii)	Vapour lock index (VLI) (VLI=10 RVP+7 E 70), Max					
	a) Summer ⁶	750	750	750		
	b) Other months	950	950	950		

- 29TH APRIL, 1999
- 1. To be carried out at the refinery end only, and the limit for the test is meant for products prior to addition of multifunctional additives, if used. However the use of multifunctional additives does not exempt the manufacturer from meeting this requirement prior to addition of additives.
- 2. Under preparation. Till such time ASTM D 873-88 (4 hour duration) shall be followed. This test shall be carried out on the gasoline before addition of multifunctional detergent/dispergent additives, as these may interfere with the test.
- 3. Lead content will be phased out as per the Government direceives as and when they are notified and the requirements of lead content shall apply accordingly.
- 4. For unleaded gasoline test method ASTM D 5058/IP 352 shall be followed.
- 5. For the gasoline-alcohol blends, the dry vapour test method given in Annex A shall be followed.
- 6. From May to July in central and northern plains of India.
- 7. In winter it is expected that temperature may be lower than 0°C in the northern hilly region and hence phase separation shall not take place till-10°C.

AMENDMENT No. 1 MARCH 1997 TO IS 2796:1995 MOTOR GASOLINES - SPECIFICATION (Second Revision).

* [page 3, Table 1, Sl. No. (viii), col 3] — Substitute '0.15' for '0.20'

IS 1460: 1995

Table 1 requirements for Diesel Fuels

(Clause 4.2)

S. No.	Characteristics	Requirements HSD	Method of Test, Ref to
(1).	₃ (2)	(3)	(4)
	Acdity inorganic	Nil	P:2
	Acdity total, mg of KOH/g Max	0.30	P:2
	Ash, percent by mass, Max	0.01	P:4
	Carbon residue (Ramsbottom) on 10 percent residue, percent by mass, Max	0.351)	P:8
	Cetane number ²), Min	45 ⁸	P:9 .
	Pour point ⁽³⁾ , Max	6°C for winter and 18°C for summer ⁴)	P:10
	Copper strip corrosion for 3h at 100°C	Not worse than No. 1	P:15
	Distillation, 90 percent volume recovery at ^o C, Max	366	P:18
	Flash point ⁵):		
	a) Abel' ^o C, Min	32	P:20
	b) Pensky-Martens, ⁰ C, Min	_	P:21
	Kinematic viscosity, cSt, at 40°C	1.8 to 5.0	P:25
٧	Sediments, percent by mass, Max	0.05	P:30
	Density at 15 °C, kg/m ²	820-880	P:32
	Total sulphur ⁶), percent by mass, Max	1.0	P:33
	Water content, percent by volume, Max	0.05	P:40
	Cold Filter Plugging Point (CFPP)2), Max	9°C for winter and 21°C for summer ⁴)	P:110
	Total sediments, mg per 100 ml ⁷), Max	1.6	

- (I) This limit is applicable prior to addition of cetane number improvers, if used. In case a value exceeding the limit is obtained on finished fuels in the market, ASTM D 4046 shall be used to establish the presence of nitrate containing cetane number improvers. In such case the present limit for carbon residue cannot be applied. However, the used of cetane number improvers does not exempt the manufacturer from meeting this requirement prior to the addition of additives.
- (2) When a test engine is not available or when the quantity of the sample is too small for an engine rating 'Calculated Cetane Index by Four Variable Equation' by ASTM D 4737 may be used for estimation of cetane number. The error in prediction of the 'Calculated Cetane Index' by this method will be less than ±2 Cetane Number for fuels having Cetane Number within the range of 32 to 56. It may be noted that this method is not applicable to pure hydrocarbons or fuels containing cetane improvers of fuels derived from coal. For arbitration purposes, the direct determination of cetane number by meals of the standardized engine test shall be used unless the buyer and the seller agree otherwise.
- (3) Subject to agreement between the purchaser and the supplier, a lower or higher maximum pour point and CFPP may be required for special applications and geographical areas.
- (4) Winter shall be the period from November to February (both months inclusive) and rest of the months of the year shall be called as summer.
- (5) Diesel fuel for naval applications including Merchant navy and fishing vessels of 12 metres and above in length shall have a flash point of 66°C Min, when tested by the method prescribed in IS 1448 [P:21]:1970.
- (6) Total sulphur content for HSD shall stand automatically revised as per the following schedule; although efforts will be made by the oil companies to reduce sulphur content below 1.0 percent by mass even before 1998:

	1998	2000
Total sulphur content,		
Percent by mass, Max	0.50	 0.25

(7) This test shall be carried out only at the refinery or manufacturer's end and the limit for this test is meant for products prior to addition of multifunctional additives if used. However, the use of multi-functional additives does not exempt the manufacturer from meeting this requirement prior to the addition of additives.

AMENDMENT No. 1 MARCH 1997

ТО

IS 1460: 1995 DIESEL FUELS-SPECIFICATION

(Third Revision)

(Page 1, clause 2) - Insert "[P:16]: 1990 Density of crude petroleum and liquid petroleum products by hydrometer method (third revision)' after '[P:15]: 1976'

[Page 3, Table 1, Sl. No. (v), col 3] - Substitute '458' for '45' and insert following foot-note after foot-note '7':

8) For diesel fuel processed from Assam crude, the value of 42 minimum shall apply till 31 December, 1999.'

- [Page 3, Table 1, foot-note '6)'] Substitute the following for the existing foot-note:
- ⁶⁾ Total sulphur content for HSD shall stand automatically revised as per the following schedule:
 - (i) 0.5 percent Max for the HSD supplied to 4 metropolitan cities of Delhi, Bombay, Madras and Calcutta and the Taj trapezium with effect from 1 April, 1996.
 - (ii) 0.25 percent Max in Taj trapezium by 1 October, 1996.
 - (iii) 0.25 percent Max throughout the country with effect from 1 April, 1999.
- [Page 3, Table 1, Sl. No. (xiii), col 6] Substitute 'P:33° for 'P:33' and insert the following foot-note after new foot-note 8):
- ^{'9)} The test method given in IP 336 may also be permitted for testing of total sulpur as an alternative method. However, in case of dispute, method given in P:33 of IS 1448 shall be the refree method.'

[Page 3 Table 1, foot-note '7'] — Substitute the following for the existing:

^{'7)} The test shall be carried out only at the refinery or manufacturer's end.

As an alternative, the test method ASTM D 2274, may be used and in such case the value of total insolubles shall be 2.5 mg//100 ml Max. In case of dispute with regard to the test to be followed, ASTM D 2274 shall be the refree test method.'

[Page 3, Table 1, Sl. No. (xii), col 6]—Substitute 'P:16¹⁰ or P:32 'P:32" and insert the following foot-note after new foot-note '9':

'10) In case of dispute with regard to the test to be followed. 'P:32 shall be the referee test method.'

SCHEDULE II

[See Clause 2 (k)]

Details of norms for permissible stock variation

Variation in stocks in underground tanks is considered to be beyond normal operation level when the inspection establishes that the variation in stocks in the underground tanks is beyond 4% tank stock over and above:

- (i) Evaporation/handling losses in motor spirit as follows—
 - 0.75% on annual average sales of 0-600 Kilolitres. 0.60% on annual average sales of above 600 Kilolitres.
 - (ii) Handling losses in high speed diesel as follows—
 - 0.25% on annual average sales of 0-600 Kilolitres. 0.20% on annual average sales of above 600 Kilolitres.

(Shrinkage losses on motor spirit high speed diesel and temperature variation allowance quantities on HSD to be taken into account wherever the same are applicable).

Note — In case of variation beyond permissible limits in the stocks of motor spirit or high speed diesel, dealer's explanation will be called for before any action is taken under the provisions of this order

SCHEDULE III

[See Clause 5 (5)]

Laboratories for testing of Petroleum Product Samples

HINDUSTAN PETROLEUM CORPORATION LIMITED LABORATORIES

- (1) Hindustan Petroleum Corpn. Ltd., Fuels Refinery Division Laboratory, Corridor Road, Mahul, Mumbai -400074
- (2) Hindustan Petroleum Corpn. Ltd., Lubes Refinery Laboratory, Corridor Road, Mahul, Mumbai 400 074.
- (3) Hindustan Petroleum Corpn. Ltd., Visakh Refinery Laboratory, P. O. Box No. 50, Vishakhapatnam 530001.
- (4) Hindustan Petroleum Corpn. Ltd., Mazgaon Laboratory, Havbundor Road, Mumbai 400 033.
- (5) Hindustan Petroleum Corpn. Ltd., Budge Budge Laboratory, Budge Budge, 24 Paraganas, West Bengal 743 319.
- (6) Hindustan Petroleum Corpn. Ltd., Laboratory 98/99; Elaya Mudali Street, P. O. Box No. 1170 Washermanpat P. O., Chennai.
- (7) Hindustan Petroleum Corpn. Ltd., Laboratory Rohtak Road, Shakurbasti, Delhi-110056.
- (8) Hindustan Petroleum Corpn. Ltd., Laboratory P. B. No. 43, Gandhidham (Kachch) 370 201.
- (9) Hindustan Petroleum Corpn. Ltd., Vasco Terminal Laboratory, P. B. No. 48, Vasco-D-Gama, Goa.
- (10) Hindustan Petroleum Corpn. Ltd., Ernakulam Terminal Laboratory, P. B. No. 2611, Ernakulam, Cochin-682031.
- (11) Hindustan Petroleum Corpn. Ltd., Loni Terminal Laboratory, Loni Kalbhor, Pune 412 201.
- (12) Hindustan Petroleum Corpn. Ltd., D-99, TTC Indl. Area, P. B. No. 2, Vashi 400 703, New Mumbai.

INDIAN OIL CORPORATION LTD.

- (13) Indian Oil Corporation Ltd., (Marketing Division), Allahabad Laboratory, Post Box No. 44, Allahabad 211 001.
- (14) Indian Oil Corporation Ltd., Ambala Laboratory, G. T. Road, Pipeline Terminal, Ambala Cantonment, PIN-133001 (Haryana).
- (15) Indian Oil Corporation Ltd., Jalandhar Laboratory, Suchipind, Jalandhar City 144 009.
- (16) Indian Oil Corporation Ltd., Mughalsarai Laboratory, Mughalsarai 232 101.
- (17) Indian Oil Corporation Ltd., Haldia Laboratory, P. O. Haldia Refinery, Dist. Midnapur (West Bengal).
- (18) Indian Oil Corporation Ltd., Port Blair Laboratory, Andaman & Nicobar Island, Port Blair.
- (19) Indian Oil Corporation Ltd., Bangalore Laboratory, Banasawadi Road, M. S. Nagar, Bangalore 360033.
- (20) Indian Oil Corporation Ltd., Antop Hill Laboratory, Antop Hill, Wadala, Mumbai 400 031.
- (21) Indian Oil Corporation Ltd., Shakurbasti Laboratory, Opp. Shivaji Park, Shakurbasti, Delhi 110056.

- (22) Indian Oil Corporation Ltd., Delhi Terminal Laboratory, Gurgaon Road, Bijwasan, New Delhi.
- (23) Indian Oil Corporation Ltd., Calcutta Airport Terminal Laboratory (Dum Dum Lab), Calcutta Airport, Calcutta 700052.
- (24) Indian Oil Corporation Ltd., Korkapet Laboratory, Kathiavakkam High Road, Chennai 600 021.
- (25) Indian Oil Corporation Ltd., Laboratory, Railway Colony Post, Ahmedabad 300 019.
- (26) Indian Oil Corporation Ltd., Rajabandh Terminal Laboratory, Durgapur 713212.
- (27) Indian Oil Corporation Ltd., Laboratory, Sipara, Post Persav, Poon Poon, Patna.
- (28) Indian Oil Corporation Ltd., Laboratory, Near new Jalpaiguri Station, Post Siliguri 734 401.
- (29) Indian Oil Corporation Ltd., Laboratory, Village Panchpara, P. O. Radhadashi, Distt. Howrah.
- (30) Indian Oil Corporation Ltd., Laboratory, Panambur, Mangalore, Pin 575 010.
- (31) Indian Oil Corporation Ltd., Laboratory, Wellington Islands, P. B. No. 35, Cochin 682 003.
- (32) Indian Oil Corporation Ltd., Naphtha Terminal Project, Laboratory, Opp. United Salt Works, Kandla Port, Post Office Kandla (Kutch).
- (33) Indian Oil Corporation Ltd., Laboratory, P. B. No. 154, Vasco-D-Gama, Goa 403 001.
- (34) Indian Oil Corporation Ltd., Laboratory, Malkapuram Post Office, Vishakhapatnam 530011.
- (35) Indian Oil Corporation Ltd., Laboratory, Tuticorin Harbour Project Premises, Tuticorin 620 004.
- (36) Indian Oil Corporation Ltd., Laboratory, Post Office Armapore, Kanpur 208 009.
- (37) Indian Oil Corporation Ltd., Laboratory, 24 Paraganas, Budge Budge 743 319.
- (38) Indian Oil Corporation Ltd., Laboratory, Post Office Fatch Bagh, Industrial Estate, Sannath Nagar, Hyderabad-500018.
- (39) Indian Oil Corporation Ltd., Mathura Refinery Laboratory, P. O. Mathura Refinery, Mathura 231 005 (UP.)
- (40) Indian Oil Corporation Ltd., Barauni Oil Refinery Laboratory, Dist. Begusarai 851 112 (Bihar).
- (41) Indian Oil Corporation Ltd., Gauhati Oil Refinery Laboratory, Noonmati, Gauhati-701 020 (Assam).
- (42) Indian Oil Corporation Ltd., Gujarat Oil Refinery Laboratory, P.O. Jawaharnagar, Dist. Vadodra 391 320.
- (43) Indian Oil Corporation Ltd., (Assam Oil Division), Digboi Refinery Laboratory, P. O. Digboi, Assam - 786 171.
- (44) Indian Oil Corporation Ltd., (R&D Centre), Sector 13, Faridabad 121,001 Haryana,
- (45) Indian Oil Corporation Ltd., Laboratory, "Pir Pau", Trombay, Mumbai 400074.
- (46) Indian Oil Corporation Ltd., Laboratory, Ennore High Road, Tondiapet, Thiruvottyur Post, Chennai 600 081.

- (47) Indian Oil Corporation Ltd., Laboratory, P-68, C. G. R. Diversion Road, Paharpur, Calcutta-700 043.
- (47-A) Indian Oil Corporation Ltd., Bhilai Laboratory, Near Railway Goods Shed, Bhilai (M.P.).
- (47-B) Indian Oil Corporation Ltd., Bhopal Laboratory, Diwangiri, Nishatpur, Bhopal-462 001.
- (47-C) Indian Oil Corporation Ltd., Haldia Laboratory, P.O. Haldia Refineries, Dist, Midnapur, West Bengal.
- (47-D) Indian Oil Corporation Ltd., Missamari Laboratory, Dist. Darrang, P.O. Missamari, Assam.
- (47-E) Indian Oil Corporation Ltd., Jaipur Laboratory, Sanganer Airport, Jaipur-302011.

BHARAT PETROLEUM CORPORATION LTD. LABORATORIES

- (48) Bharat Petroleum Corpn. Ltd., R&D Centre, 'A' Installation, Sewree (East), Mumbai-400013.
- (49) Bharat Petroleum Corpn. Ltd., Budge Budge Installation Lab., Budge Budge, P.O. Budge Budge, West Bengal-0743319.
- (50) Bharat Petroleum Corpn. Ltd., tondiarpet Installation Lab., Tondiarpet, P.B. No. 1152, Chennai-600001.
- (51) Bharat Petroleum Corpn. Ltd., Shakurbasti Installation Lab., Shakurbasti, Delhi-110056.
- (52) Bharat Petroleum Corpn. Ltd., Ernakulam Installation
 Lab., P.B. No. 2615, Goods Shed Road, Ernakulam,
 Cochin-682031.
- (53) Bharat Petroleum Corpn. Ltd., Kandla Installation Lab., P.B. No. 33, Post Gandhidham, Gujarat-370201.

IBP CO. LIMITED LABORATORY

- (54) IBP Co. Ltd., Sewree Terminal Laboratory, Mumbai-400 015.
- (55) IBP Co. Ltd., IBP Laboratory, Depot Laboratory, Rohtak Road, Shakurbasti, New Delhi-110034.
- (55-A) IBP Co. Limited's Laboratory 93, M.S. Koil Street, Near Royapuram Bridge, Massey's Godown, Chennai.
- (55-B) IBP Co. Ltd., Cauvery Basin Marketing Terminal, Muttam Village, Melavanjore P.O. Nagapattinam-611 002, Nagore Taluk, Nagai Qued-e-Millet Dist., Tamil Nadu.
- (55-C) IBP Co. Ltd., 3, Grahm Road, Budge Budge, 24, Paraganas (S), West Bengal.

MOBILE LABORATORIES OF OIL COMPANIES

(56) Mobile Laboratories of Oil Companies (IOC, BPC, IBPCo. & HPC).

OTHER REFINERY LABORATORIES

- (57) Bongaigaon Oil Refinery Ltd., Refinery Laboratory, P.O. New Bongaigaon, Dist. Kokrajhar, Assam.
- (58) Madras Refinery Laboratory, Madras Refineries Ltd., Manali, Chennai-600019.
- (59) Cochin Refinery Ltd., Refinery Laboratory, Post Ambalamugal, Cochin-682302.

GOVERNMENT LABORATORIES

- (60) Director of Airworthiness, Civil Aviation Deptt. Laboratory, Block II/III East, R.K. Puram, New Delhi-110066.
- (61) National Test House, 11/1, Judges Court Road, Alipore, Calcutta-700027.
- (62) National Physical Laboratory, Pusa, New Delhi-110 012.
- (62-A) Chemical Testing and Analytical Laboratory, Industries and Commerce Department, Government of Tamil Nadu, Guindy.

DEFENCE LABORATORIES

- (63) Chief Controlrate of Materials, Controlrate General of Stores Laboratory, IGS Kanpur, P.B. No. 229, Kanpur.
- (64) Inspectorate General of Stores Laboratory (I.G.S.L.), DGI Complex, Chennai-600114.
- (65) Inspectorate General of Stores Laboratory, DGI Complex, Hastings, Calcutta-700 022.
- (66) Inspectorate General of Stores Laboratory, DGI Complex, Vikhroli, Mumbai-400083.

OTHER LABORATORIES

- (67) Indian Institute of Petroleum, Dehra Dun-248 005.
- (68) Indian Institute of Technology, Guindy, Chennai.
- (69) Indian Institute of Technology, Hauz Khas, New Delhi,
- (70) Indian Institute of Technology, Powai, Mumbai.
- (71) Indian Institute of Technology, Kharagpur.
- (72) Regional Research Laboratory, Uppal Road, Hyderabad-500007.

And all Forensic Laboratories in States/UTs.

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DEVI DAYAL, Addl. Secy.